

## Recombinant Mouse ACTH protein (His Tag)

**Catalog Number: PDEM100257**

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

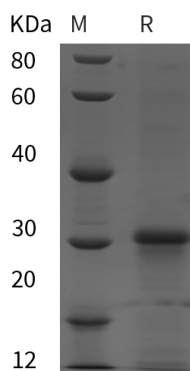
### Description

<b>Species</b>	Mouse
<b>Source</b>	E.coli-derived Mouse ACTH protein Trp27-Gln235, with an N-terminal His
<b>Calculated MW</b>	22.9 kDa
<b>Observed MW</b>	30 kDa
<b>Accession</b>	P01193
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95% as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 10 EU/mg of the protein as determined by the LAL method
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
<b>Reconstitution</b>	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

Adrenocorticotrophic hormone (ACTH)/corticotropin is a 39 amino acid peptide generated by cleavage of the POMC, a preprotein which also can also be cleaved to produce MSH, Beta-endorphin and Met-enkephalin, depending on tissue expression and context. ACTH is a ligand for the ACTH receptor, also known as melanocortin receptor 2. ACTH is secreted by the anterior pituitary gland upon stimulation by corticotropin-releasing hormone (CRH) which is secreted by the hypothalamus. The principal effect of ACTH is production of cortisol by the adrenal gland but it also mediates bone formation and osteoblast survival. ACTH has been shown to induce insulin resistance in adipocytes and promote pro-inflammatory adipokine secretion.

### For Research Use Only